

COUNTRY ANALYSIS BRIEFS

India

Last Updated: August 2010

Background

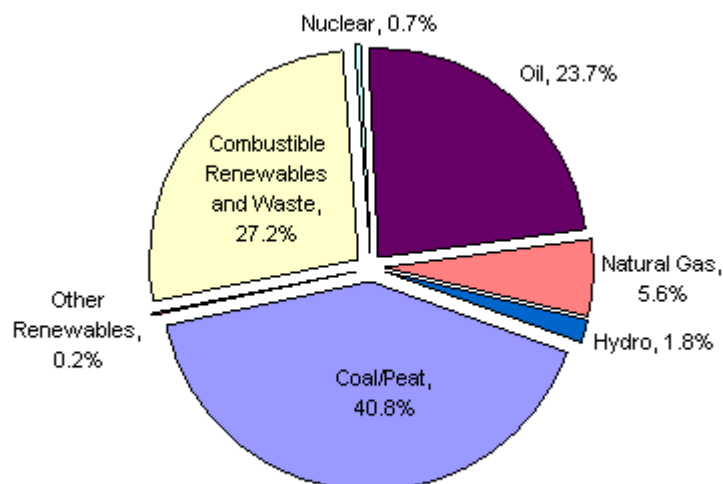
India boasts a growing economy, and is increasingly a significant consumer of oil and natural gas.

With high economic growth rates and over 15 percent of the world's population, India is a significant consumer of energy resources. In 2009, India was the fourth largest oil consumer in the world, after the United States, China, and Japan. Despite the global financial crisis, India's energy demand continues to rise. In terms of end-use, energy demand in the transport sector is expected to be particularly high, as vehicle ownership, particularly of four-wheel vehicles, is forecast to increase rapidly in the years ahead.



India lacks sufficient domestic energy resources and imports much of its growing energy requirements. In addition to pursuing domestic oil and gas exploration and production projects, India is also stepping up its natural gas imports, particularly through imports of liquefied natural gas.

According to the International Energy Agency (IEA), coal/peat account for nearly 40 percent of India's total energy consumption, followed by nearly 27 percent for combustible renewables and waste. Oil accounts for nearly 24 percent of total energy consumption, natural gas six percent, hydroelectric power almost 2 percent, nuclear nearly 1 percent, and other renewables less than 0.5 percent. Although nuclear power comprises a very small percentage of total energy consumption at this time, it is expected to increase in light of international civil nuclear energy cooperation deals. According to the Indian government, nearly 30 percent of India's total energy needs are met through imports.

Total Energy Consumption in India, by Type (2007)

Source: International Energy Agency (IEA)

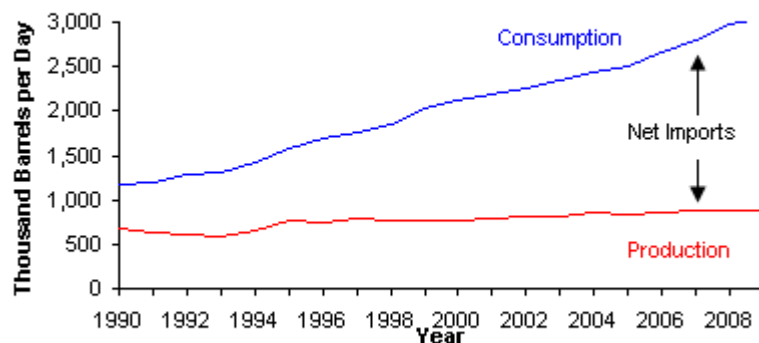
IEA data for 2008 indicate that electrification rates for India were nearly 65 percent for the country as a whole. In urban areas, 93 percent had access to electricity compared to rural areas where electrification rates were approximately 50 percent. Roughly 400 million people do not have access to electricity in India.

Oil

The Indian government continues to hold licensing rounds in an effort to promote exploration activities and boost domestic oil production.

According to *Oil & Gas Journal* (OGJ), India had approximately 5.6 billion barrels of proven oil reserves as of January 2010, the second-largest amount in the Asia-Pacific region after China. India's crude oil reserves tend to be light and sweet, with specific gravity varying from 38° API in the offshore Mumbai High field to 32° API at other onshore basins.

India produced roughly 880 thousand barrels per day (bbl/d) of total oil in 2009 from over 3,600 operating oil wells. Approximately 680 thousand bbl/d was crude oil, the remainder was other liquids and refinery gain. In 2009, India consumed nearly 3 million bbl/d, making it the fourth largest consumer of oil in the world. EIA expects approximately 100 thousand bbl/d annual consumption growth through 2011.

India's Oil Production and Consumption 1990-2009*

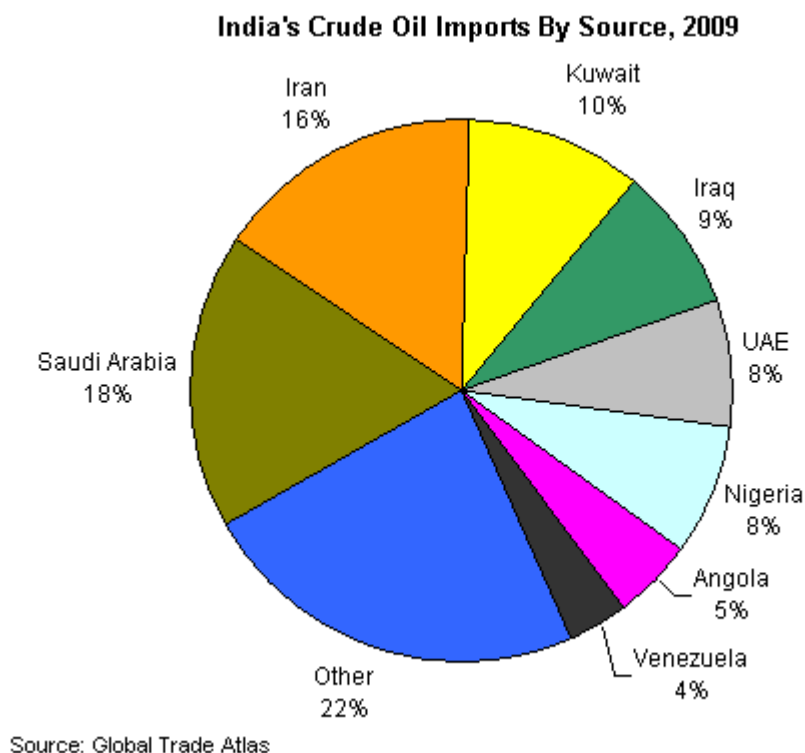
Source: U.S. Energy Information Administration

*2008-09 is forecast

The combination of rising oil consumption and relatively flat production has left India increasingly

dependent on imports to meet its petroleum demand. In 2009, India was the sixth largest net importer of oil in the world, importing nearly 2.1 million bbl/d, or about 70 percent, of its oil needs. The EIA expects India to become the fourth largest net importer of oil in the world by 2025, behind the United States, China, and Japan.

Nearly 70 percent of India's crude oil imports come from the Middle East, primarily from Saudi Arabia, followed by Iran. The Indian government expects this geographical dependence to rise in light of limited prospects for domestic production.



Sector Organization

Though the government has taken steps in recent years to deregulate the hydrocarbons industry and encourage greater foreign involvement, India's oil sector is dominated by state-owned enterprises. India's state-owned Oil and Natural Gas Corporation (ONGC) is the largest oil company and dominates India's upstream sector. State-owned Oil India Limited (OIL) is the next largest oil producer. Other major state-run players include the Indian Oil Corporation (IOC) and the Gas Authority of India Limited (GAIL). In addition, the private Indian firm, Reliance Industries Limited, is becoming a significant operator in the oil sector and is the largest private oil and gas company in the country. Cairn India, a branch of UK-based Cairn Energy, and BG Exploration are also important private sector operators in the industry.

As a net importer of oil, the Indian government has policies aimed at increasing domestic exploration and production (E&P) activities. As part of an effort to attract oil majors with deepwater drilling experience and other technical expertise, the Ministry of Petroleum and Natural Gas created the New Exploration License Policy (NELP) in 2000, which for the first time permits foreign companies to hold 100 percent equity ownership in oil and natural gas projects. Despite this, international oil and gas companies currently operate a small number of fields.

India's downstream sector is also dominated by state-owned entities. The Indian Oil Corporation (IOC) is the largest state-owned company in the downstream sector, operating 10 of India's 18 refineries and controlling about three-quarters of the domestic oil pipeline transportation network. Reliance Industries opened India's first privately-owned refinery in 1999, and has gained a considerable market share in India's oil sector.

Exploration and Production

Most of India's crude oil reserves are located offshore, in the west of the country, and onshore in the northeast. Substantial reserves, however, are located offshore in the Bay of Bengal and in Rajasthan state. India's largest oil field is the offshore Mumbai High field, located north-west of Mumbai and operated by ONGC. Another of India's large oil fields is the Krishna-Godavari basin, located in the Bay of Bengal. Block D6 in the Krishna-Godavari basin, operated by Reliance Industries, began oil production in September 2008.

The primary mechanism through which the Indian government has promoted new E&P projects has been the NELP framework. The latest round of auctions, NELP VIII, was launched in April 2009 and attracted nearly \$1.1 billion in investment. India currently plans to launch the NELP IX bidding round in the third quarter of 2010.

Overseas E&P

In recent years, Indian national oil companies have increasingly looked to acquire equity stakes in E&P projects overseas. The most active company abroad is ONGC Videsh Ltd. (OVL), the overseas investment arm of ONGC. OVL conducts oil and natural gas operations in 13 countries, including Vietnam, Myanmar, Russia (Sakhalin Island), Iran, Iraq, Sudan, Brazil, and Columbia. One of OVL's most high profile investments is its share in the Greater Nile Petroleum Operating Company (GNPOC), which has engaged in E&P work in Sudan since 1997. OVL acquired a 25 percent equity stake in the company in 2003, with the balance held by the China National Petroleum Company (CNPC, 40 percent), Petronas (30 percent), and the Sudan National Oil Company (Sudapet, 5 percent). The GNPOC acreage in Sudan holds proved crude oil reserves of more than one billion barrels with current production levels at roughly 300,000 bbl/d from 10 fields. In addition to the upstream activities, the GNPOC companies operate a 935-mile crude oil pipeline that pumps oil to Port Sudan for export.

OVL also holds a 20 percent stake in the ExxonMobil-led consortium that operates the Sakhalin-I project in Russia. According to company estimates, the oil fields associated with Sakhalin-I hold recoverable crude oil reserves of 2.3 billion barrels.

In addition to ONGC, other Indian companies are also actively involved in E&P projects abroad. OIL, for example, is working on projects in Libya, Gabon, Nigeria, and Sudan.

Downstream/Refining

According to OGJ, India had 2.8 million bbl/d of crude oil refining capacity at 18 facilities as of January 1, 2010. India has the fifth largest refinery capacity in the world. In 2009, privately-owned Reliance Industries added another refinery to its Jamnagar complex to raise the entire complex's refining capacity from 660,000 bbl/d to 1.24 million bbl/d. The Jamnagar complex is the largest oil refinery complex in the world.

Other key upcoming refinery projects include Essar Oil's Vadinar refinery expansion of 110,000 bbl/d in 2011, 120,000 bbl/d greenfield refinery in Bina in 2011 by a joint venture between Bharat Petroleum Corporation Limited and Oman Oil Company Limited, a 180,000 bbl/d grassroots refinery in Bhatinda in 2014 by Hindustan Petroleum Corporation Limited, and IOC's grassroots Paradeep refinery of 300,000 bbl/d in 2015. India is slated to add 840 thousand bbl/d of refining capacity through 2015 based on currently proposed projects.

Due to expectations of higher demand for petroleum products in the region, further investment in the Indian refining sector is likely. As part of the country's 11th Five Year Plan from 2007 to 2012, the government would like to promote India as a competitive refining destination, and industry experts expect the country to be an exporter of refined products to Asia in the near future.

Refined Fuel Subsidies

The Market Determined Price Mechanism is notionally benchmarked to international oil prices, but the Indian government heavily subsidizes domestic prices of oil products such as diesel, gasoline, kerosene, and LPG. At the same time, taxes on crude and petroleum products imposed by different layers of Indian government often exceed the subsidies. According to industry analysts, though originally an attempt to protect economically disadvantaged Indian consumers, fuel subsidies distort India's domestic market by forcing India's state owned oil companies to accept "under-recoveries" (i.e. losses) and encouraging India's private companies to orient their product sales internationally. With diesel prices significantly lower than other fuels, particularly gasoline, diesel consumption rose by nearly 20 percent from 2007 through 2009. The International Energy

Agency reports that losses from fuel price subsidies for the 2010-11 fiscal year are expected to exceed \$23 billion.

Strategic Petroleum Reserve

To support India's energy security, India is constructing a strategic petroleum reserve (SPR). The first storage facility at Visakhapatnam will hold approximately 9.8 million bbls of crude (1.33 million tons) and is scheduled for completion by the end of 2011. The second facility at Mangalore will have a capacity of nearly 11 million bbls (1.5 million tons) and is scheduled for completion by the end of 2012. The third facility of Padur, also scheduled to be completed by the end of 2012, will have a capacity of nearly 18.3 million bbls (2.5 million tons).

The selection of coastal storage facilities was made so that the reserves could be easily transported to refineries during a supply disruption. The SPR project is being managed by the Indian Strategic Petroleum Reserves Limited (ISPRL), which is part of Oil Industry Development Board (OIDB), a state-controlled organization. India does not have any strategic crude oil stocks at this time.

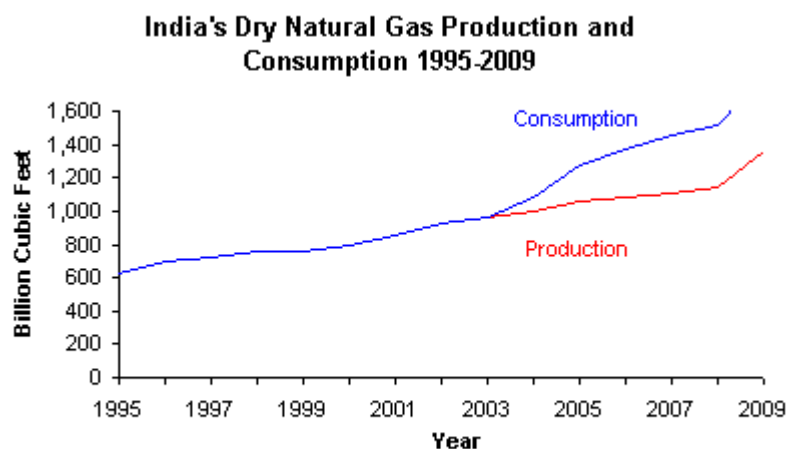
Natural Gas

Despite major new natural gas discoveries in recent years, India continues to plan on gas imports to meet its future needs.

According to *Oil and Gas Journal*, India had approximately 38 trillion cubic feet (Tcf) of proven natural gas reserves as of January 2010. The EIA estimates that India produced approximately 1.4 Tcf of natural gas in 2009, a 20 percent increase over 2008 production levels. The bulk of India's natural gas production comes from the western offshore regions, especially the Mumbai High complex, though the Bay of Bengal and its Krishna-Godavari (KG) fields are proving quite productive. The onshore fields in Assam, Andhra Pradesh, and Gujarat states are also significant sources of natural gas production.

In 2009, India consumed roughly 1.8 Tcf of natural gas, almost 300 billion cubic feet (Bcf) more than in 2008, according to EIA estimates. Natural gas demand is expected to grow considerably, largely driven by demand in the power sector. The power and fertilizer sectors account for nearly three-quarters of natural gas consumption in India. Natural gas is expected to be an increasingly important component of energy consumption as the country pursues energy resource diversification and overall energy security.

Despite the steady increase in India's natural gas production, demand has outstripped supply and the country has been a net importer of natural gas since 2004. India's net imports reached an estimated 445 Bcf in 2009.



Source: U.S. Energy Information Administration

Sector Organization

As in the oil sector, India's state-owned companies account for the bulk of natural gas production. State-run companies Oil and Natural Gas Corporation (ONGC) and Oil India Ltd. (OIL) are the main producers of natural gas in the country. According to government statistics, ONGC accounted for 69 percent of natural gas production in the country in 2007. In addition, some

foreign companies participate in upstream developments in joint-ventures and production sharing contracts (PSCs). Privately-owned Reliance Industries will also have a greater role in the natural gas sector in the coming years, as a result of a large natural gas find in 2002 in the KG basin.

Natural gas prices in India are regulated by the government. Administered Pricing Mechanism (APM) natural gas, gas produced from fields handed to ONGC and OIL by the Indian government, more than doubled in price in May 2010; from \$1.8/million (MM)Btu to \$4.2/MMBtu. This price adjustment brings APM gas, formerly the cheapest gas in India, to parity with the KG-D6 natural gas (see below). Gas produced from fields acquired through the National Export Licensing Policy (see oil section), production sharing agreements, and imported LNG is not priced using the APM, although its price is also regulated.

The Gas Authority of India Ltd. (GAIL) holds an effective monopoly on natural gas transmission and distribution activities. In December 2006, the Minister of Petroleum and Natural Gas issued a new policy that allows foreign investors, private domestic companies, and national oil companies to hold 100 percent equity stakes in pipeline projects. While GAIL's monopoly in natural gas transmission and distribution is not guaranteed by statute, it is the de facto leading player in the sector because of its existing natural gas infrastructure.

GAIL's current natural gas trunk pipeline network extends roughly 4,100 miles, according to the company, and its transmission capacity is approximately 5.2 Bcf/d. GAIL plans to build close to 3,800 additional miles of pipelines by 2012, bringing its total transmission capacity to 10.6 Bcf/d.

Exploration and Production

The outlook for India's upstream natural gas sector is more positive than its upstream oil sector, although the IEA forecasts Indian natural gas peak production between 2020 and 2030.

There have been several large natural gas finds in India over the last several years, predominantly offshore in the Bay of Bengal. ONGC announced a find in late 2006 in the Mahanadi basin off the coast of Orissa state, with an estimated 3 to 4 Tcf of reserves in place. In December 2006, ONGC announced a find of an estimated 21 to 22 Tcf of natural gas in place at the KG-DOWN-98/2 block off the coast of Andhra Pradesh in the KG basin. In addition, state-owned Gujarat State Petroleum Corporation (GSPC) holds an estimated 1.8 Tcf of natural gas reserves at the KG-OSN-2001/3 block in the KG area.

Reliance Industries' KG-D6 block holds estimated reserves of 11.5 Tcf and came online in April 2009. Of the nearly 1.4 Bcf/d of initial production, nearly half went to gas based power plants, the rest to fertilizer, LPG plants, and city gas distribution entities. After reaching a production peak of 2.8 Bcf/d in December 2009, Reliance decided in July 2010 to cap production of KG-D6 at 2.1 Bcf/d pending resolution of infrastructure and field maintenance issues. The power sector continues to receive the lion's share of production allotments. Production from the KG basin is expected to double the country's current natural gas output in coming years.

Natural Gas Imports

India's natural gas import demand is expected to increase in the coming years. To help meet this growing demand, a number of import schemes including both LNG and pipeline projects have either been implemented or considered.

Iran-Pakistan-India Pipeline

India has considered various proposals for international pipeline connections with other countries. One such scheme is the Iran-Pakistan-India (IPI) Pipeline, which has been under discussion since 1994. The plan calls for a roughly 1,700-mile, 5.4-Bcf/d pipeline to run from the South Pars fields in Iran to the Indian state of Gujarat. While Iran is keen to export its abundant natural gas resources and India is in search of projects to meet its growing domestic demand, a variety of economic and political issues have delayed a project agreement. Indian officials have made it clear that any import pipeline crossing Pakistan would need to be accompanied by a security guarantee from officials in Islamabad. Due to the uncertainties involving this pipeline, the Indian government's 11th Five Year Plan does not project any gas supply from this route or the following two discussed pipelines.

Turkmenistan-Afghanistan-Pakistan-India Pipeline

India has worked to join the Turkmenistan-Afghanistan-Pakistan Pipeline (TAP or Trans-Afghan

Pipeline). With the inclusion of India, the project consists of a planned 1,050-mile pipeline originating in Turkmenistan's Dauletabad natural gas fields and transporting the fuel to markets in Afghanistan, Pakistan, and India. In 2008, all parties agreed to induct India as a full member into the project, thereby renaming the pipeline TAPI. TAPI is envisioned to have a capacity of 3.2 Bcf/d, but work has not yet begun on the project. Concerns about the project have included the security of the route, which would traverse unstable regions in Afghanistan and Pakistan. Furthermore, a review of the TAPI project raised doubts as to whether Turkmen natural gas supplies are adequate to meet proposed export commitments.

Imports from Myanmar

A third international pipeline proposal envisions India importing natural gas from Myanmar. In March 2006, the governments of India and Myanmar signed a natural gas supply deal. Initially, the two countries planned to build a pipeline crossing Bangladesh. After indecision from Bangladeshi authorities over the plans, India and Myanmar studied the possibility of building a pipeline that would terminate in the eastern Indian state of Tripura and not cross Bangladeshi soil. In March 2009, Myanmar signed a natural gas supply deal with China sourced from a field invested in by GAIL and ONGC, putting any India-Myanmar pipeline deal in question.

Liquefied Natural Gas

India began importing liquefied natural gas (LNG) in 2004. In 2008, India imported 372 Bcf of LNG, nearly 75 percent of it from [Qatar](#), making it the sixth largest importer of LNG in the world. India imports LNG through both long-term contracts and spot shipments.

Currently, India has two operational LNG import terminals, Dahej and Hazira. India received its first LNG shipments in January 2004 with the start-up of the Dahej terminal in Gujarat state. Petronet LNG, a consortium of state-owned Indian companies and international investors, owns and operates the Dahej LNG facility with a capacity of 5 million tons per year (mtpa) (975 Bcf/y). India's second terminal, Hazira LNG, started operations in April 2005, and is owned by a joint venture of Shell and Total. The facility has a capacity of 2.5 mtpa (488 Bcf/y), which may be expanded to 5 mtpa (975 Bcf/y) in the future.

The 5 mtpa (975 Bcf/y) LNG processing plant in Dabhol continues to face delays. Currently operating as a power plant, the LNG receiving terminal may be operational in 2011 after dredging operations are complete so that a breakwater can be built.

In addition, Petronet LNG has begun construction of a 2.5 mtpa (488 Bcf/y) LNG import facility at Kochi. The facility is expected to be completed in the first quarter of 2012 and has secured a 1.5 mtpa (293 Bcf/y) supply from Australia's Gorgon LNG project.

In order to secure supply of natural gas to India and meet growing demand, India is currently looking to invest in liquefaction projects abroad. For example, ONGC and the UK-based Hinduja Group are considering service contracts in Iran to supply 5 mtpa (975 Bcf/y) of LNG to India. The country is also exploring the possibility of investing more in the Sakhalin I LNG project.

Long-term growth in demand for LNG remains unclear however, as price is an issue of contention in India and increasing domestic natural gas production is expected from eastern offshore fields. Industry analysts note that Indian companies appear unwilling to commit to long-term LNG supply contracts at international prices. While negotiations are currently underway for several long-term LNG supply deals, whether or not India's bids will be accepted is questionable in light of the low prices that India has offered to pay. Instead, India is becoming an important destination for spot LNG cargoes.

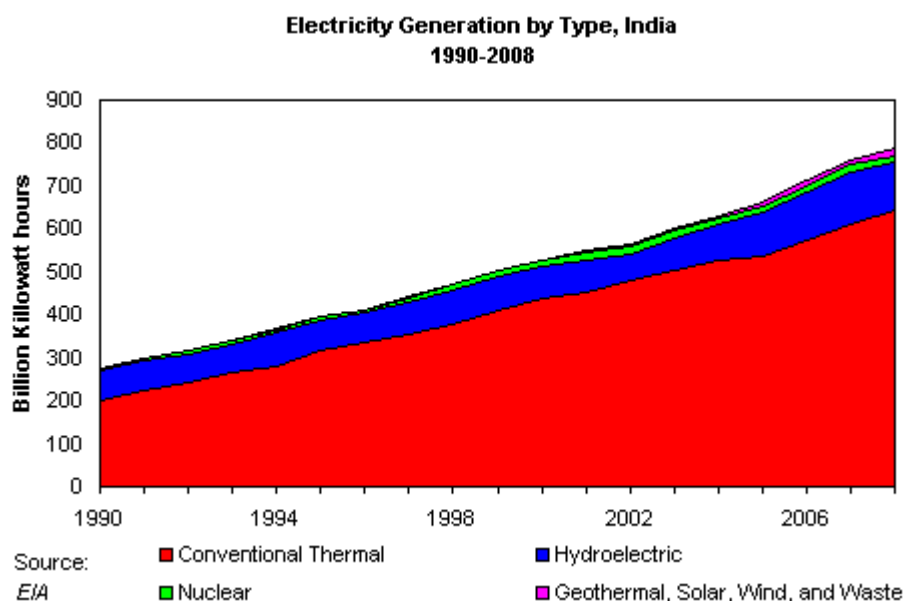
Electricity

India currently suffers from a major shortage of electric generating capacity.

In 2007, India had approximately 159 gigawatts (GW) of installed electric capacity and generated 761 billion kilowatt hours. Nearly all electric power in India is generated with coal, oil, or gas. Conventional thermal sources produced over 80 percent of electricity in 2007. Hydroelectricity, a seasonally dependent power source in India, accounted for nearly 16 percent of power generated in 2007. Finally, nuclear energy produced roughly 2 percent of electricity during the same year, while geothermal and other renewable sources accounted for approximately 2 percent.

In July of 2010, India and Bangladesh signed a 35 year power import deal whereby India will import up to 500 megawatts beginning in late 2012. India also imports some electricity from Bhutan and Nepal. However, these electricity imports are not likely to prove sufficient to make up

for India's lack of electric generation capacity.



Electricity Shortages

India suffers from a severe shortage of electricity generation capacity. According to the World Bank, roughly 40 percent of residences in India are without electricity. In addition, blackouts are a common occurrence throughout the country's main cities. Further compounding the situation is that total demand for electricity in the country continues to rise and is outpacing increases in capacity. Additional capacity has failed to materialize in India in light of market regulations, insufficient investment in the sector, and difficulty in obtaining environmental approval and funding for hydropower projects. In addition, coal shortages are further straining power generation capabilities.

In order to address this shortfall, the Indian government continues to work towards adding capacity. India's 11th Plan set an ambitious goal of adding nearly 79,000 MW by 2012. The country also grapples with electricity efficiency issues. In order to improve efficiency standards, the Energy Conservation Act was passed in 2002, which established the Bureau of Energy Efficiency and has sought to promote efficient use of energy and labeling of energy-intensive products.

Conventional Thermal Power Generation

Conventional thermal-generated power accounted for 80 percent of electricity in India in 2007. Of these sources, coal is by far the most important fuel source for power generation, with roughly 70 percent of electricity generated in coal-fired power plants. India is both the third-largest consumer and third-largest producer of coal in the world, and though the country supplies the bulk of its needs domestically, it is currently a net coal importer. In spite of the electric sector's heavy reliance on coal, natural gas is becoming increasingly important due to environmental considerations, quality concerns pertaining to the steel industry, and supply constraints surrounding coal. The Hazira plant in Gujarat was converted to natural gas in 2002, and the Dabhol plant will run on natural gas once fully completed. The outcome of Reliance Power's (R-Power) plan to build the world's largest natural gas-fired power plant at Dadri in Uttar-Pradesh, expected to have a capacity of 8 gigawatts, is currently uncertain as per the recent legal proceedings amongst the members of the Reliance family.

Nuclear Power Generation

The Indian government continues to focus on the development of nuclear power to meet its power generation targets. Though controversy has historically surrounded India's nuclear program in light of the country's refusal to sign the Nuclear Nonproliferation Treaty (NPT) and its 1974 nuclear weapons test, India has recently established a civil nuclear cooperation deal with the United States. The U.S.- India civil nuclear energy cooperation deal signed in July 2005, also

known as the “123 Agreement”, allows for civil nuclear trade between the U.S. and India with the goal of increasing India’s installed nuclear power generation capacity.

In light of the deal, the Indian government has set its nuclear generation target at 40,000 MW by 2020. India currently has 14 nuclear reactors in commercial operation with more planned. Recently, India bought six nuclear reactors from Areva of France and four from Rosatom of Russia. They are slated for the Maharashtra and Tamil Nadu nuclear projects. Combined, the ten new reactors will add 11,000 MW of electric capacity to the country.

Hydropower and Other Renewables

As part of India’s goal of diversifying its sources of electric power generation and increasing the country’s capacity, increased use of hydroelectric power is also included in the government’s plans. International organizations such as the World Bank are providing funding for a variety of hydroelectric projects around the country. However, lack of reliability and environmental and community concerns surrounding construction may make it difficult to fully capitalize upon this domestic energy resource.

Geothermal, solar, and wind power hold little importance in electric power generation in the country. However, the government would like the share of renewables in electricity production to increase.

Profile

Energy Overview

Proven Oil Reserves (January 1, 2010)	5.6 billion barrels
Oil Production (2009)	879,000 barrels per day, of which 77% was crude oil.
Oil Consumption (2009)	3.0 million barrels per day
Proven Natural Gas Reserves (January 1, 2010)	38 trillion cubic feet
Natural Gas Production (2009)	1,365 billion cubic feet
Natural Gas Consumption (2009)	1,810 billion cubic feet
Recoverable Coal Reserves (2005)	62,300 million short tons
Coal Production (2009)	613.4 million short tons
Coal Consumption (2009)	680.9 million short tons
Electricity Installed Capacity (2007)	159 gigawatts
Electricity Generation (2007)	761 billion kilowatt hours
Electricity Consumption (2007)	568 billion kilowatt hours
Total Energy Production (2007)	13.05 quadrillion Btus*
Total Energy Consumption (2007)	19.1 quadrillion Btus*, of which Coal (53%), Oil (31%), Natural Gas (8%), Hydroelectricity (6%), Nuclear (1%), Other Renewables (1%)
Total Per Capita Energy Consumption (2007)	17.0 million Btus
Energy Intensity (2007)	6,500 Btu per \$2000-PPP**

Environmental Overview

Energy-Related	1,494 million metric tons
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Carbon Dioxide Emissions (2008)

Per-Capita, Energy-Related Carbon Dioxide Emissions (2008) 1.31 metric tons

Carbon Dioxide Intensity (2008) 0.48 Metric tons per \$1,000-PPP**

Oil and Gas Industry

Organization Petroleum: Oil and Natural Gas Corporation (ONGC); Oil India Ltd. (OIL); Indian Oil Corporation (IOC); Reliance Industries (private). Natural Gas: Gas Authority of India Ltd (GAIL)

Major Oil/Gas Ports Oil - Bombay, Cochin, Haldia, Kandla, Madras, Vizag; LNG – Hazira, Dahej

Foreign Company Involvement BG International, BP, Cairn Energy, Marubeni, Niko Resources, Petronas, Shell

Major Refineries (capacity, bbl/d) Reliance Petroleum: Jamnagar (1,240,000). IOC: Koyali (185,100), Mathura (156,000), Panipat (120,000). Mangalore Refinery and Petrochemicals Ltd: Mangalore (180,000). Hindustan Petroleum Corporation: Vishakapatnam (164,250), Mahul (132,000). Kochi Refineries Ltd: Ambalamugal (152,000). Chennai Petroleum Corporation: Madras (130,660). Bharat Petroleum Company Ltd: Mahul (120,000).

* The total energy consumption statistic includes petroleum, dry natural gas, coal, net hydro, nuclear, geothermal, solar, wind, wood and waste electric power.

**GDP figures from Global Insight estimates based on purchasing power parity (PPP) exchange rates.

Links**EIA Links**

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[U.S. Embassy in India](#)

Foreign Government Agencies

[India's Ministry of Petroleum and Natural Gas](#)

[India's Department of Commerce](#)

[India's Ministry of External Affairs](#)

Oil and Natural Gas

[Gas Authority of India Ltd \(GAIL\)](#)

[Indian Oil Corporation \(IOC\)](#)

[Oil and Natural Gas Corporation \(ONGC\)](#)

[ONGC Videsh](#)

[Oil India Ltd \(OIL\)](#)

[Reliance Industries Ltd](#)

Sources

Asia Pulse

Associated Press

BBC

Business Standard

CIA World Factbook

Dow Jones Newswires

Economist Intelligence Unit

Energy Economist

Eurasia Group

FACTS Global Energy

Financial Times

GAIL

Global Insight
The Hindu
Hindustan Times
IEE Japan
IHS Energy
International Energy Agency (IEA)
International Gas Report
Lloyd's List
Offshore Technology Conference 2007
Oil and Gas Journal
Oil India Limited
Petroleum Economist
Petroleum Intelligence Weekly
PFC Energy
PIRA
Platts energy
Reliance Industries Ltd.
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